

FIG. 1

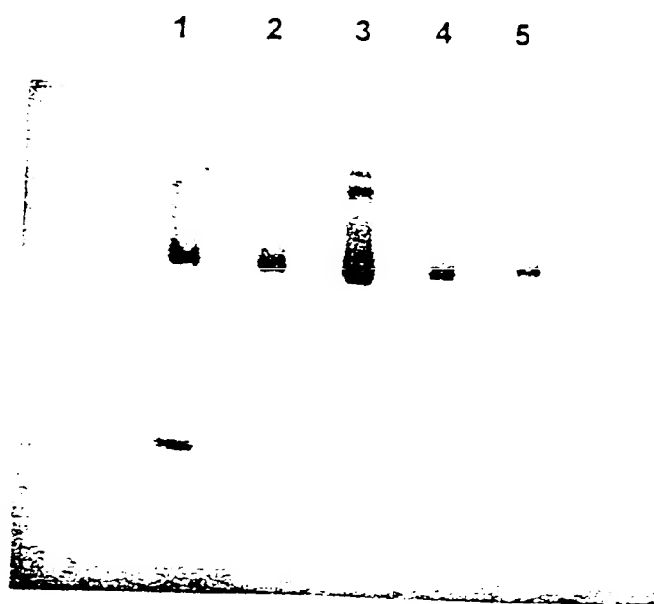


FIG. 2

1 2 3 4 5 6



FIG. 3

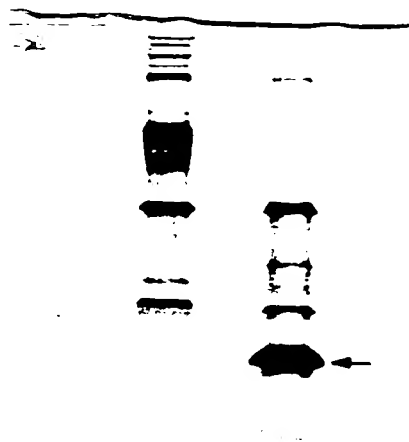


FIG. 4

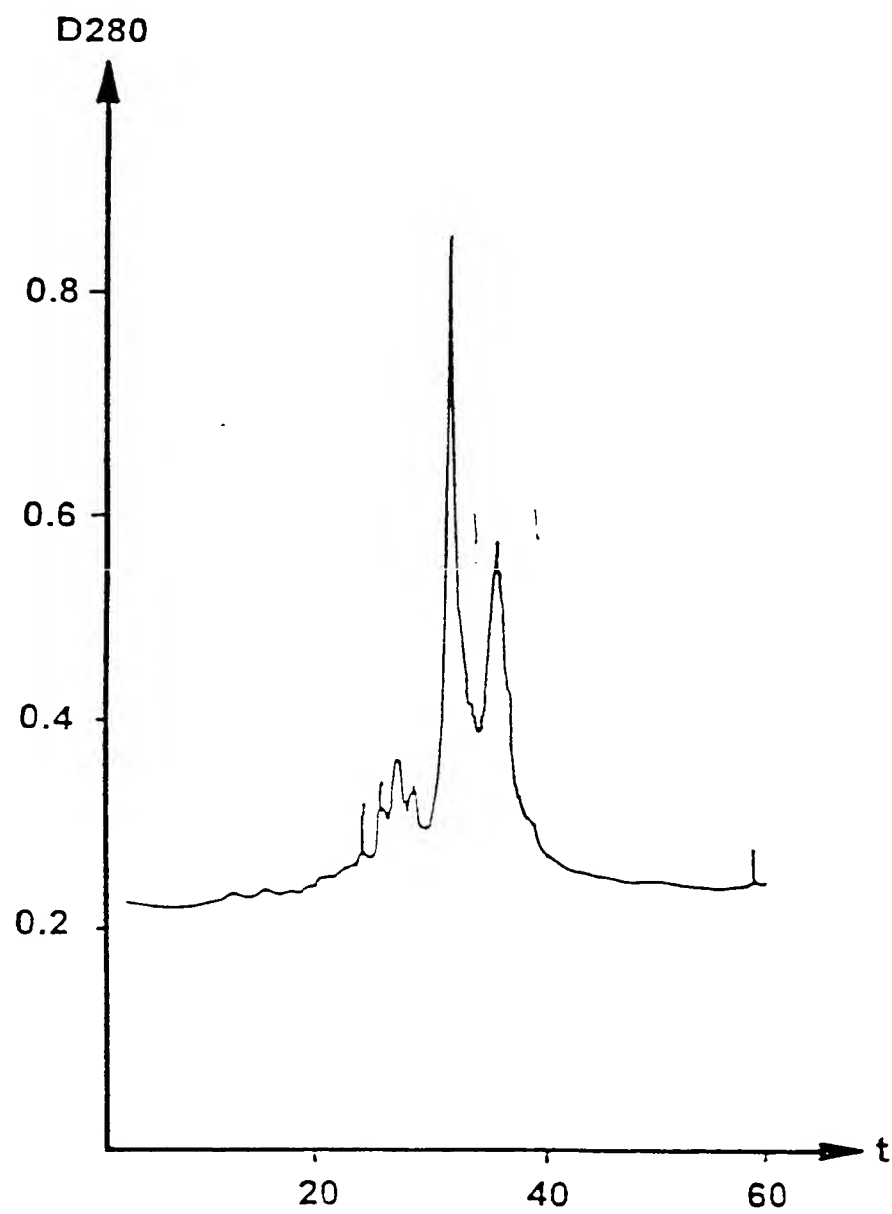


FIG. 5

FDCPmix proliferation inhibition by
INPROL: direct effect *in vitro*

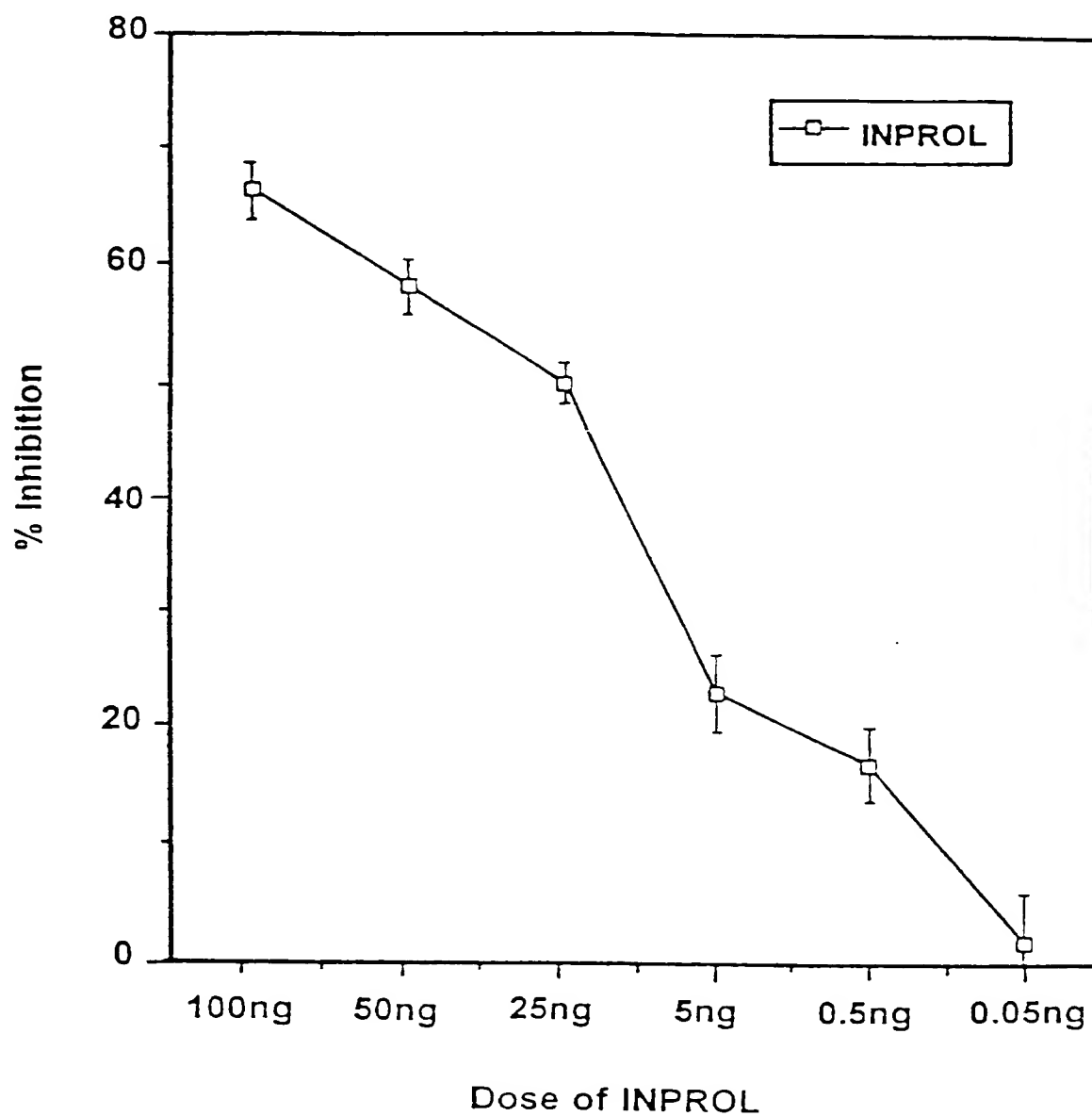


FIG. 6

INPROL affects the dynamic of CFU-S proliferation inhibition

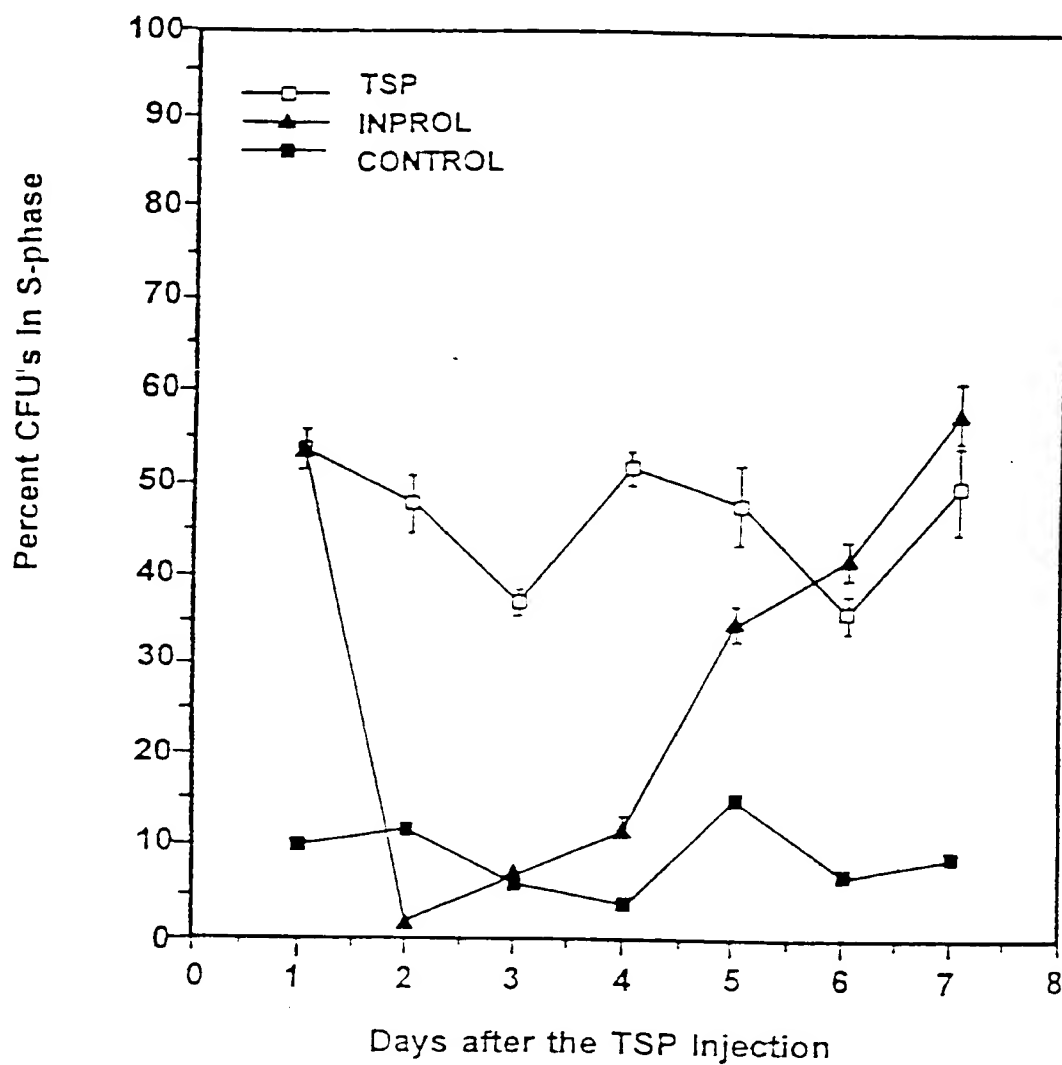
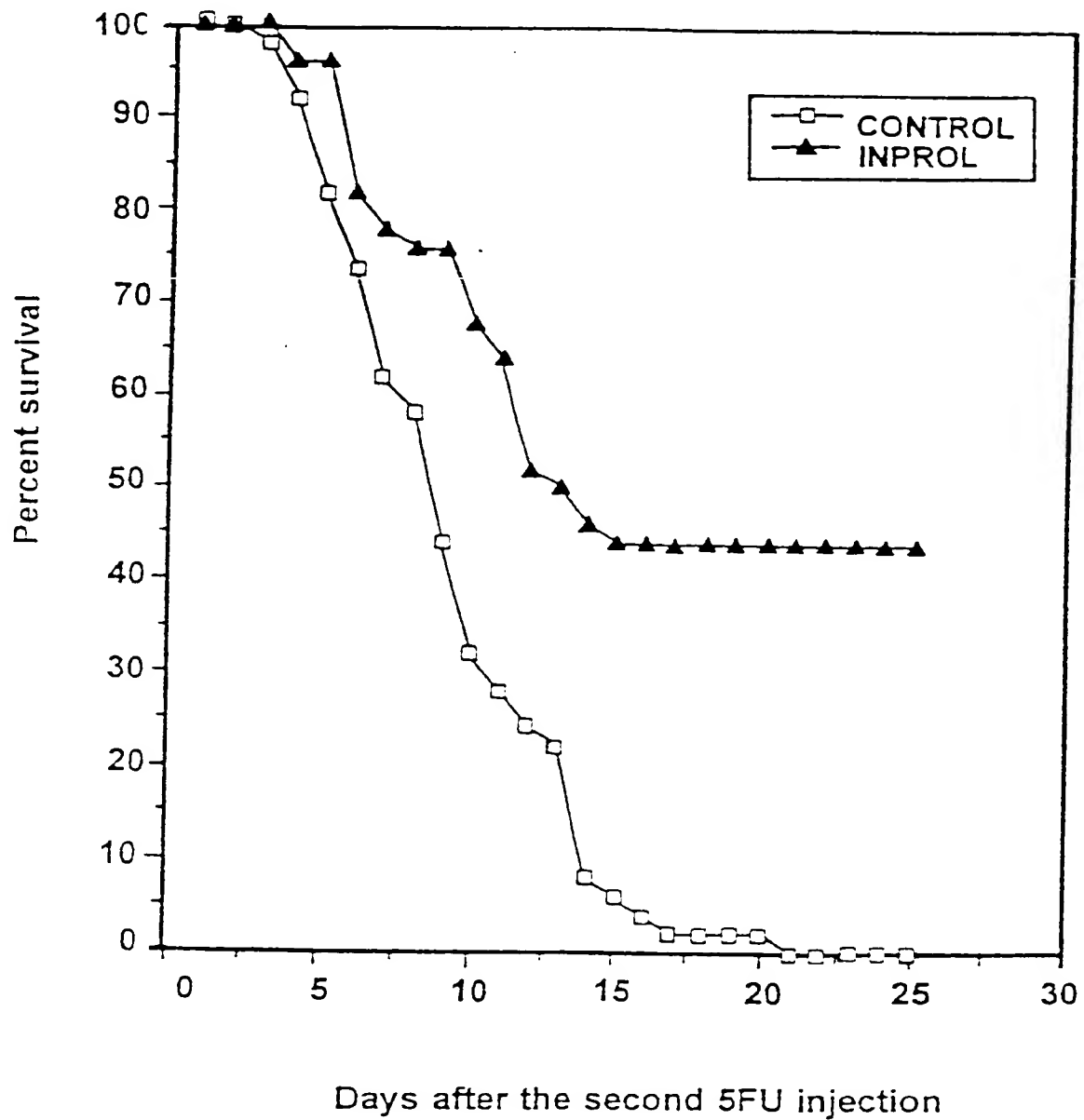


FIG. 7

FIG. 8

INPROL injected *in vivo* protects mice
from lethal double 5FU treatment



Survival of lethally irradiated
mice after treatment with INPROL

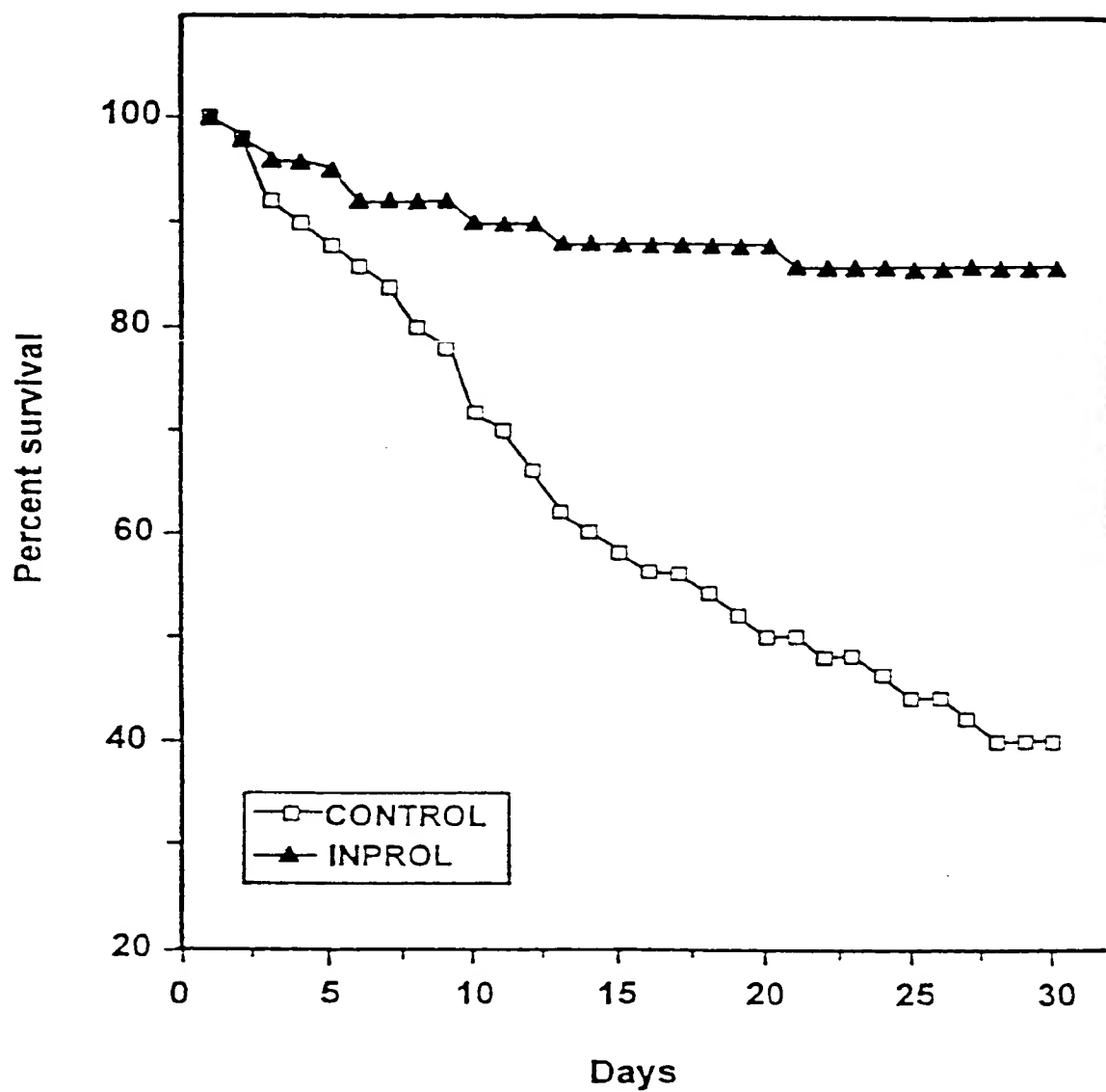


FIG. 9

Cell regeneration in BMLTC - L1210 cultures
after combined AraC plus Inprol treatment

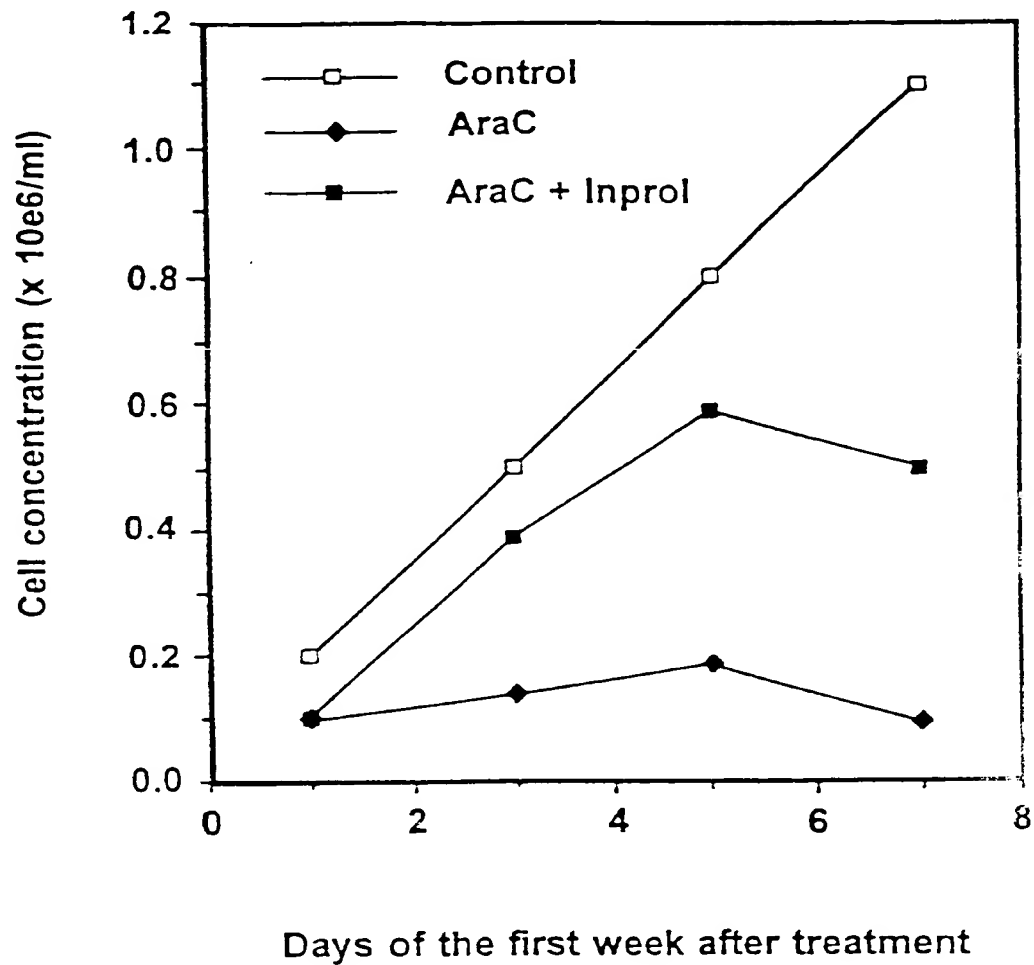


FIG. 10A

Cell regeneration in BMLTC - L1210 cultures
after combined AraC plus Inprol treatment

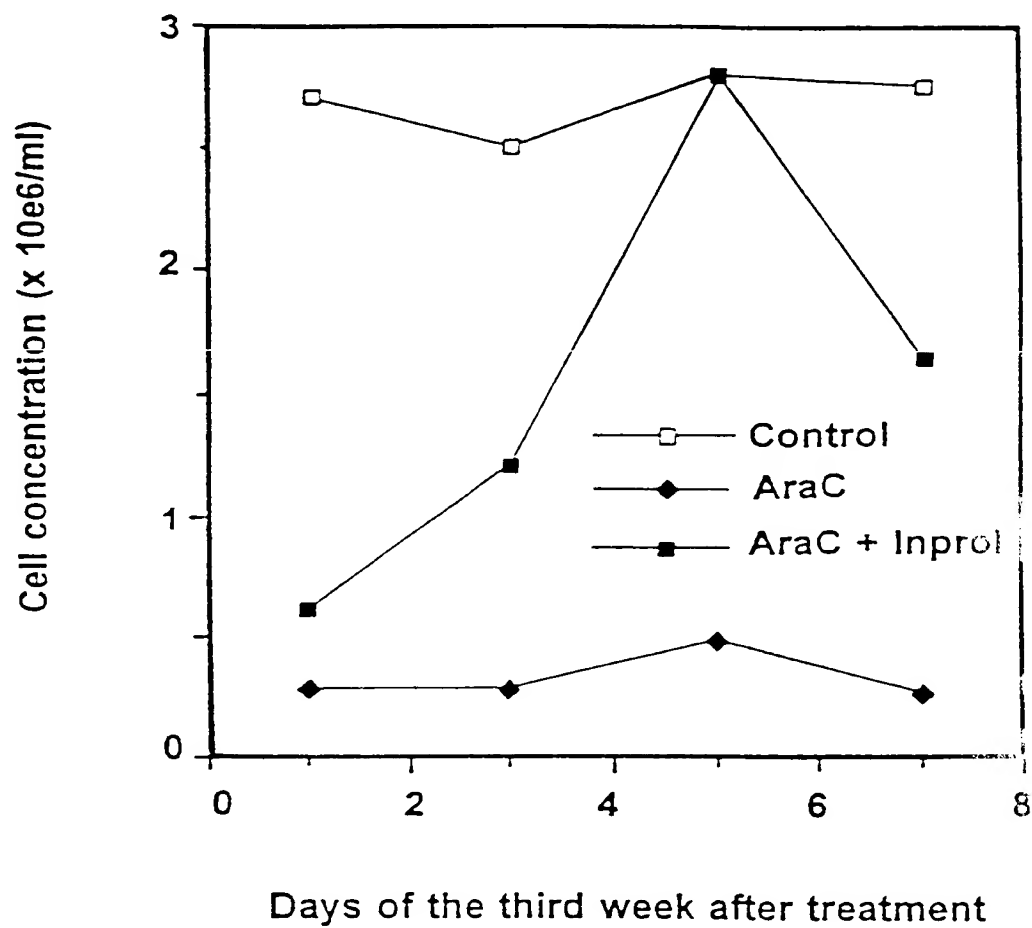


FIG. 10B

30 days radioprotection by the bone marrow cells
after preincubation with (B) or without (A) INPROL

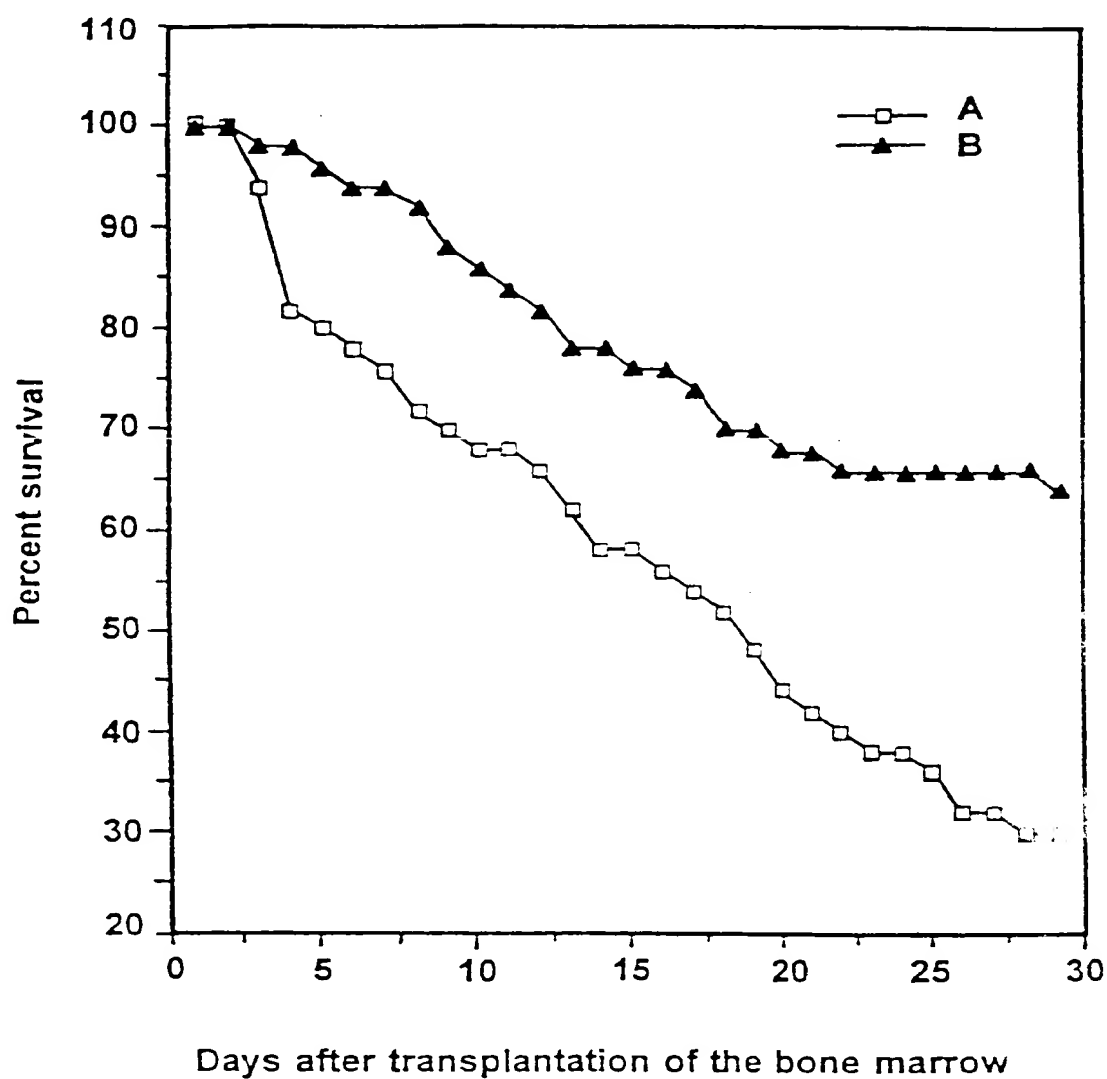


FIG. 11

Marrow repopulating ability of BDF1
mice cells after incubation with INPROL

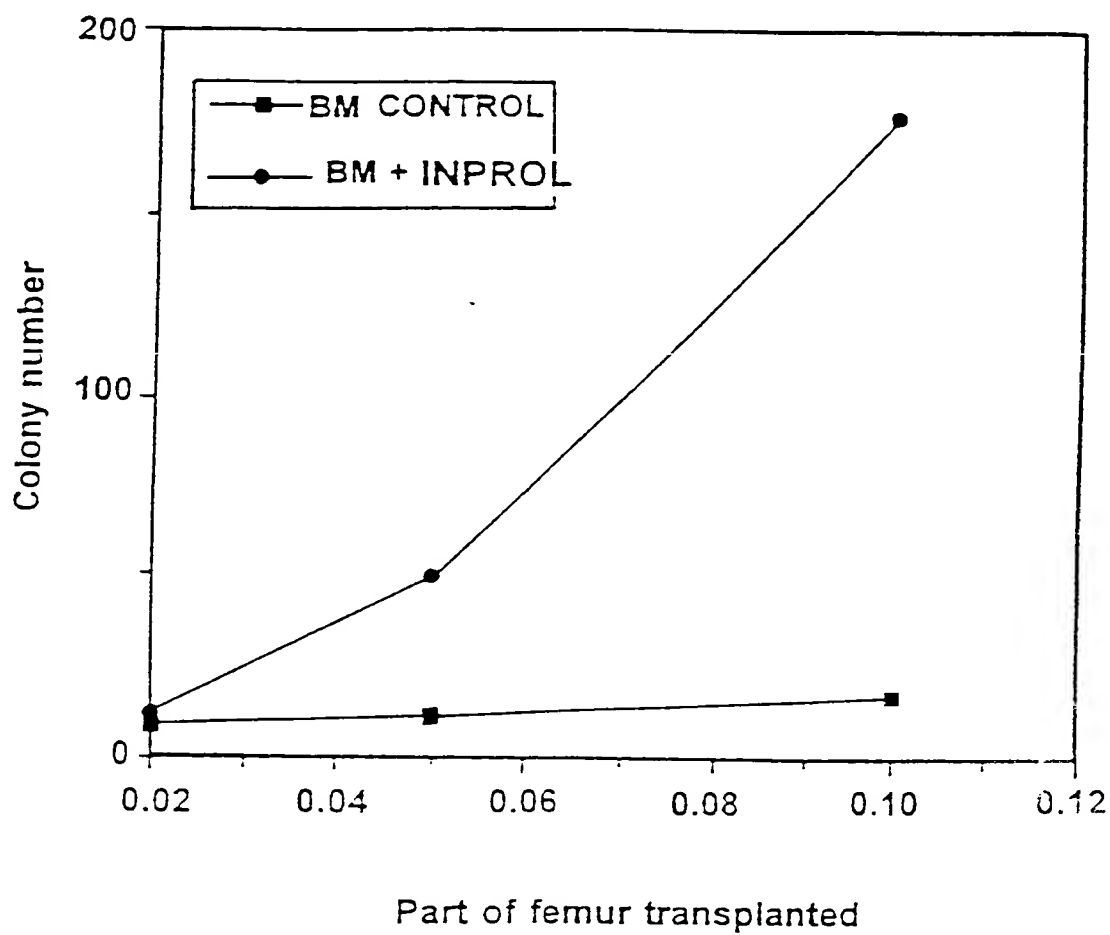


FIG. 12

Pre-B progenitors number in Lymphoid Long Term Culture
after preincubation with or without INPROL

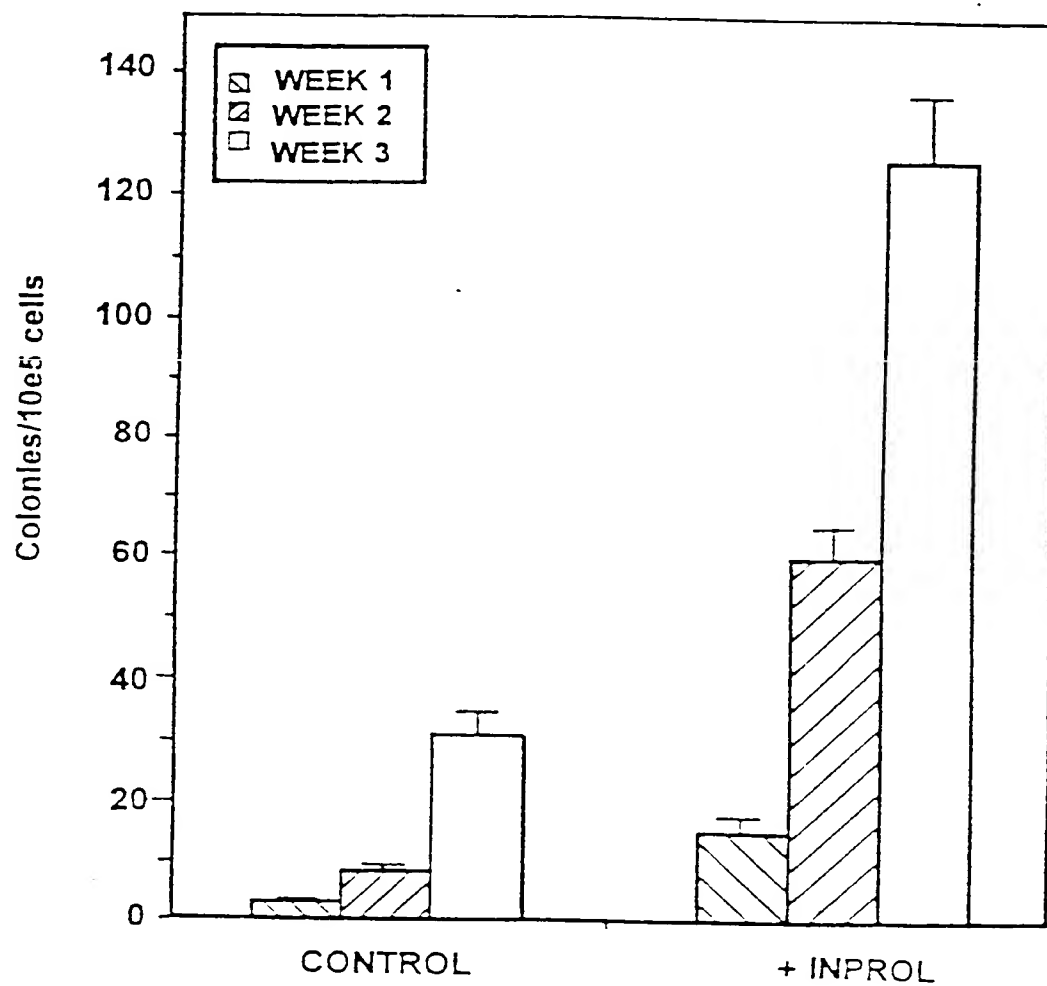


FIG. 13

INPROL improves the repopulating ability
(LTC-IC number) of leukemic peripheral blood cells

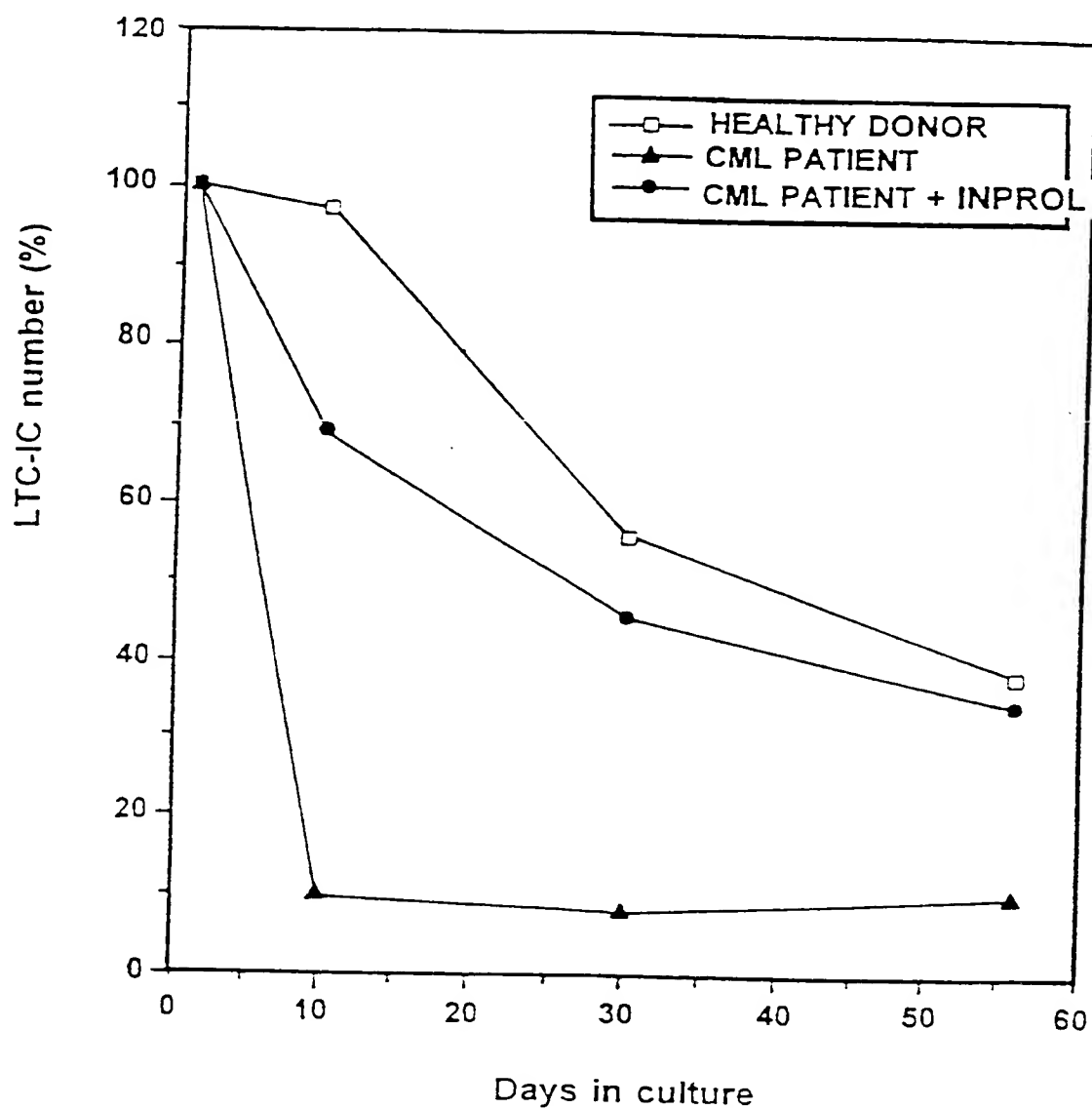
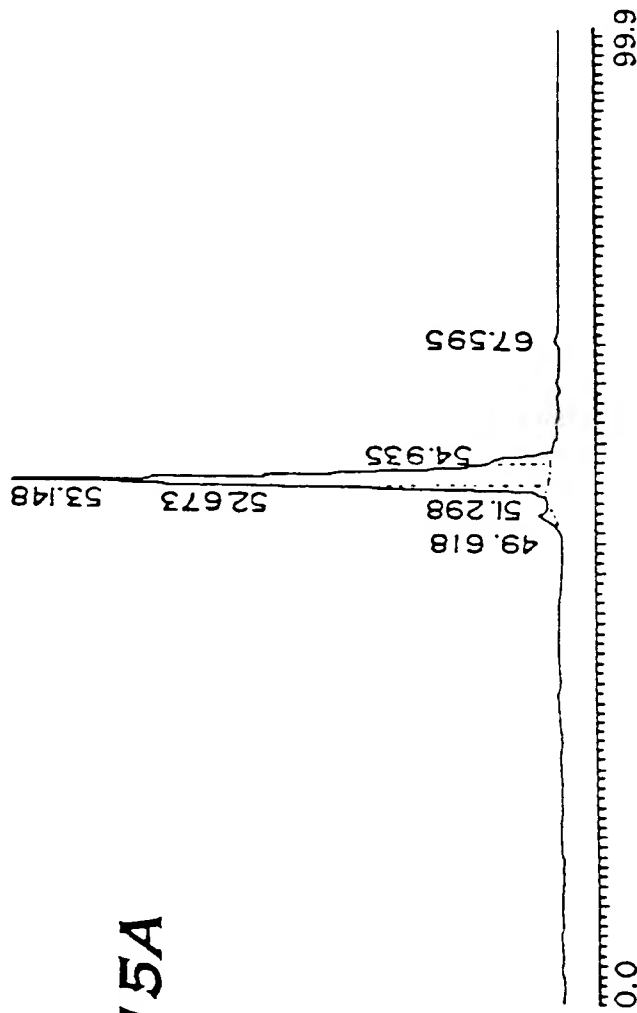


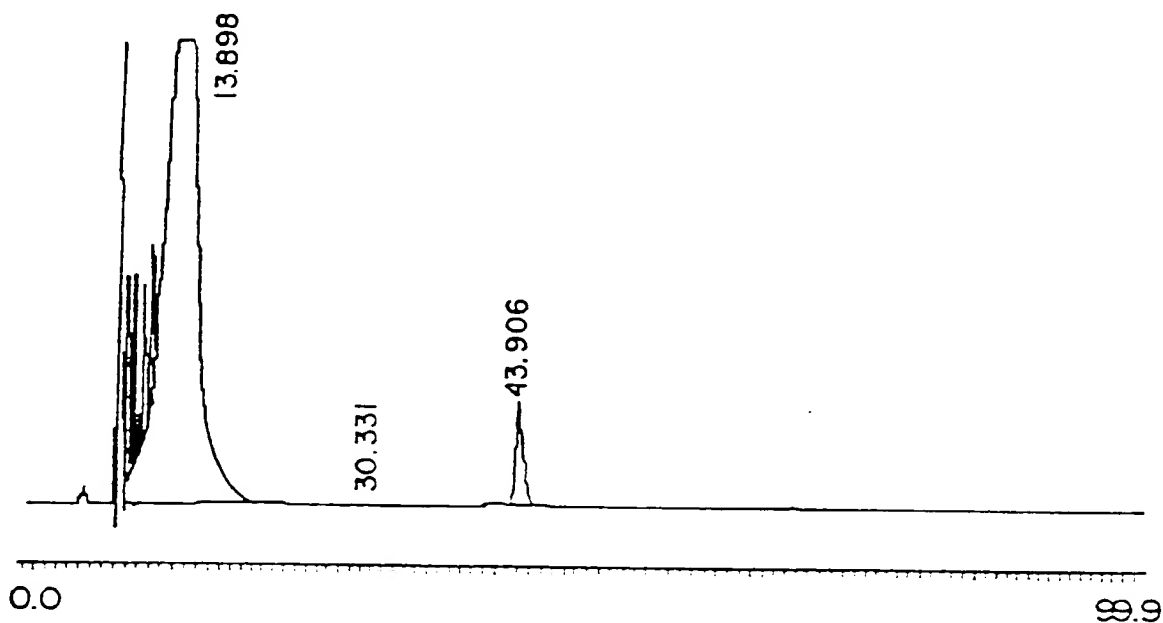
FIG. 14

FIG. 15A



Analysis: Channel A

Peak No.	Time	Type	Height(μ V)	Area(μ V-sec)	Area%
1	3.126	N1	691	7578	0.041
2	3.315	N2	1011	5150	0.027
3	49.618	N	8584	349227	1.893
4	51.298	N	1456	20274	0.109
5	52.673	N1	138069	2633395	14.278
6	53.148	N2	271587	14050458	76.181
	54.935	N3	33016	1332820	7.226
	67.595	N	3270	44507	0.241
TOTAL AREA				18443409	99.996



Analysis: Channel A

Peak No.	Time	Type	Height(μ Y)	Area(μ Y-sec)	Area%
1	4.383	N1	3945	95125	0.119
2	5.080	N2	28639	330889	0.413
3	5.216	N3	49084	531867	0.665
4	7.980	N1	399424	1110511	1.389
5	8.100	ET	1203320	2882013	3.605
6	8.241	N3	443249	1506159	1.884
7	8.386	N4	481563	2185702	2.734
8	8.533	N5	412886	1826165	2.284
9	8.701	N6	321500	842122	1.053
10	8.745	N7	404661	1610380	2.014
11	8.995	N8	435765	2489721	3.114
12	9.316	N9	517790	4801831	6.007

FIG. 15B



FIG. 15C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Val	Leu	Ser	Pro	Ala	Asp	Lys	Thr	Asn	Val	Lys	Ala	Ala	Trp	Gly	Lys	Val	Gly	Ala	His	
GTG	CTG	TCT	CCT	GCC	GAC	AAG	ACC	AAC	GTC	AAG	GCC	GCC	TGG	GGT	AAG	GTC	GGC	GGC	CAC	
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
Ala	Gly	Glu	Tyr	Gly	Ala	Glu	Ala	Leu	Glu	Arg	Met	Phe	Leu	Ser	Phe	Pro	Thr	Thr	Lys	
GCT	GCC	GAG	TAT	GGT	GCG	GAG	GCC	CTG	GAG	AGG	ATG	TTC	CTG	TCC	TTC	CCC	ACC	ACC	AAG	
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	
Thr	Tyr	Phe	Pro	His	Phe	Asp	Leu	Ser	His	Gly	Ser	Ala	Gln	Val	Lys	Gly	His	Gly	Lys	
ACC	TAC	TTC	CCG	CAC	TTC	GAC	CTG	AGC	CAC	GCC	TCT	GCC	CAC	GTT	AAG	GCC	CAC	GCC	AAG	
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	
Lys	Val	Ala	Asp	Ala	Leu	Thr	Asn	Ala	Val	Ala	His	Val	Asp	Asp	Met	Pro	Asn	Ala	Leu	
AAG	GTC	GCC	GAC	GCG	CTG	ACC	AAC	GCC	GTC	GCG	CAC	GTC	GAC	GAC	ATG	CCC	AAC	GCG	CTG	
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
Ser	Ala	Leu	Ser	Asp	Leu	His	Ala	His	Lys	Leu	Arg	Val	Asp	Pro	Val	Asn	Phe	Lys	Leu	
TCC	GCC	CTG	AGC	GAC	CTG	CAC	GCG	CAC	AAG	CTT	CCG	GTC	GAC	CCG	GTC	AAC	TTC	AAG	CTC	
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	
Leu	Ser	His	Cys	Leu	Leu	Val	Thr	Leu	Ala	Ala	His	Leu	Pro	Ala	Glu	Phe	Thr	Pro	Ala	
CTA	AGC	CAC	TGC	CTG	CTG	GTC	ACC	CTC	GCC	GCG	CAC	CTC	CCC	GCC	GAG	TTC	ACC	CCT	GCG	
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141
Val	His	Ala	Ser	Leu	Asp	Lys	Phe	Leu	Ala	Ser	Val	Ser	Thr	Val	Leu	Thr	Ser	Lys	Tyr	Arg
GTG	CAC	GCC	TCC	CTG	GAC	AAG	TTC	CTG	GCT	TCT	GTC	AGC	ACC	GTC	CTG	ACC	TCC	AAA	TAC	GCT

Fig. 16A

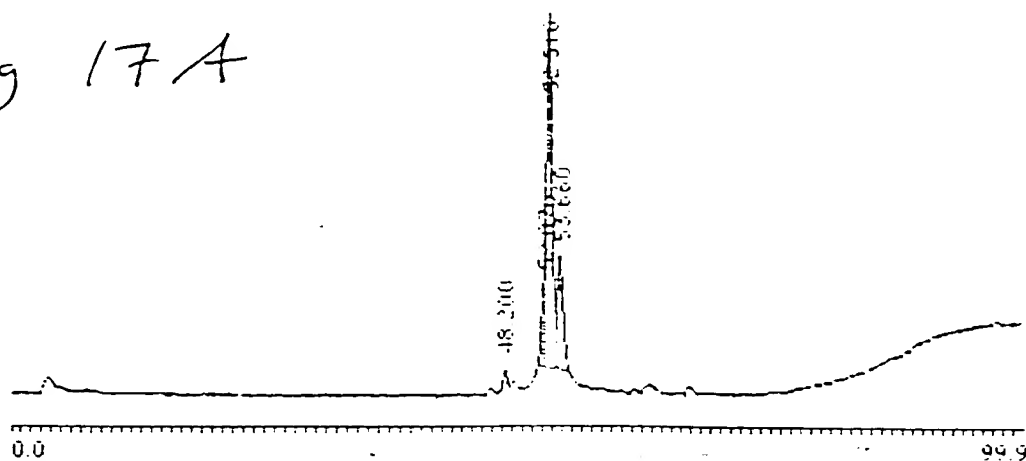
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Val	His	Leu	Thr	Pro	Glu	Glu	Lys	Ser	Ala	Val	Thr	Ala	Leu	Trp	Gly	Lys	Val	Asn	Val
GTG	CAC	CTG	ACT	CCT	CAG	CAG	AAG	TCT	GCC	GTT	ACT	CCC	CTG	TGG	GGT	AAG	GTC	AAC	GTG
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Asp	Glu	Val	Gly	Gly	Glu	Ala	Leu	Gly	Arg	Leu	Leu	Val	Val	Tyr	Pro	Trp	Thr	Gln	Arg
GAT	GAA	GTT	GGT	GGT	CAG	CCC	CTG	CCC	AGG	CTG	CTG	GTG	GTC	TAC	CTT	TGG	ACC	CAG	AGG
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Phe	Phe	Glu	Ser	Phe	Gly	Asp	Leu	Ser	Thr	Pro	Asp	Ala	Val	Met	Gly	Asn	Pro	Lys	Val
TTC	TTT	GAG	TCC	TTT	GGG	GAT	CTG	TCC	ACT	CCT	GAT	GCT	GTT	ATG	GGC	AAC	CCT	AAG	GTG
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Lys	Ala	His	Gly	Lys	Lys	Val	Leu	Gly	Ala	Phe	Ser	Asp	Gly	Leu	Ala	His	Leu	Asp	Asn
AAG	CCT	CAT	GGC	AAG	AAA	GTG	CTG	GGT	GGC	TTT	AGT	GAT	GGC	CTG	GCT	CAC	CTG	CAC	AAC
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Leu	Lys	Gly	Thr	Phe	Ala	Thr	Leu	Ser	Glu	Leu	His	Cys	Asp	Lys	Leu	His	Val	Asp	Pro
CTC	AAG	GGC	ACC	TTT	GGC	ACA	CTG	AGT	CAG	CTG	CAC	TGT	CAC	AAG	CTG	CAC	GTC	GAT	CCT
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Glu	Asn	Phe	Arg	Leu	Leu	Gly	Asn	Val	Leu	Val	Cys	Val	Leu	Ala	His	His	Phe	Gly	Lys
GAG	AAC	TTC	AGG	CTG	CTG	GGC	AAC	GTG	CTG	GTC	TGT	GTC	CTG	GGC	CAT	CAC	TTT	GGC	AAA
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
Glu	Phe	Thr	Pro	Pro	Val	Gln	Ala	Ala	Tyr	Gln	Lys	Val	Val	Ala	Gly	Val	Ala	Asn	Ala
CAA	TTC	ACC	CCA	CCA	CTG	CAG	GCT	GGC	TAT	CAC	AAA	GTG	GTC	GCT	GGT	GTC	GCT	AAT	GGC
141	142	143	144	145	146														
Leu	Ala	His	Lys	Tyr	His														
CTG	GGC	CAC	AAG	TAT	CAC														

Fig. 16 B

		10	20	30	40	50	
hHemA.pep	1	V-L-S-A-D-K-N	V-K-A-A-G-R-V-C-A	H-A-G-E-V-G-A-E-A	E-E-R-M-F-L-S-E-F	I-T-K-N-Y-F-P-H-E	50
hHemB.pep	1	V-H-L-P-E-E-K-S-S	V-E-L-L-I-G-K-V	-N-V-D-E-V-G-G-E-A	E-G-R-I-L-L-V-V-Y-E	W-I-O-R-E-E-S-E-F-G	50
mHemA.pep	1	V-L-S-E-A-D-K-N	E-K-A-A-V-C-A-E-G	H-G-A-E-V-G-A-E-A	E-E-R-M-F-A-S-E-E	I-T-K-N-Y-F-P-H-E	50
mHemB.pep	1	V-H-L-D-A-K-K-A-A	V-S-C-L-I-G-A-V-N-S	E---E-V-G-G-E-A	E-L-G-R-I-L-L-V-V-Y-E	W-I-O-R-Y-E-D-S-E-F-G	50
pHemA.pep	1	V-L-S-A-D-K-N	V-K-A-A-G-R-V-C-G	O-E-S-A-H-G-A-E-A	E-E-R-M-F-L-G-E-F	I-T-K-N-Y-F-P-H-E	50
pHemB.pep	1	V-H-L-S-E-E-K-S-S	V-L-G-L-I-G-K-V-V	E---E-V-G-G-E-A	E-L-G-R-I-L-L-V-V-Y-E	W-I-O-R-E-E-S-E-F-G	50
		60	70	80	90	100	
hHemA.pep	51	D-I-L-S-E-----G	S-A-Q-V-E-G-H-G-K-A	V-A-D-E-L-I-N---	A-V-A-E-V-D-D-M-P-N	A-I-L-S---A-L-S-D-I	100
hHemB.pep	51	D-I-L-S-E-D-A-V-M-G	N-E-K-V-K-A-H-G-K-K	V-I-G-A---E-S-I-D	G-L-A-H-I-L-D-N-L-K-G	T-E-A---T-I-L-S-E-L	100
mHemA.pep	51	D-V-S-E-----G	S-A-Q-V-E-G-H-G-K-K	V-A-D-A-L-A-S---	A-A-G-H-I-L-D-D-I-L-G	A-I-L-S---A-L-S-D-I	100
mHemB.pep	51	D-I-L-S-E-S-S-I-M-G	N-A-K-V-K-A-H-G-E-E	V---I-T-A-E-N-D	G-L-N-H-I-L-D-S-I-L-K-G	T-E-A-S-I---S-E-L	100
pHemA.pep	51	N-I-L-S-E-----G	S-D-Q-V-K-A-H-G-Q-K	V-A-D-A-L-I-K---	A-V-G-H-I-L-D-D-I-L-G	A-I-L-S---A-L-S-D-I	100
pHemB.pep	51	D-I-L-S-E-D-A-V-M-G	N-E-K-V-K-A-H-G-K-K	V---L-O-S-E-F-S-I-D	G-L-C-H-I-L-D-N-L-K-G	T-E-A-K-L---S-E-L	100
		110	120	130	140	150	
hHemA.pep	101	H-A-S-K-L-R-V-D-E-V	N-E-R-I-L-S-H-C-I-L	V-T-L-A-A-H-I-P-A-E	E-T-P-A-V-H-A-S-I-L-D	-K-E-L-A-S-V-S-I-V	150
hHemB.pep	101	H-C-D-K-L-E-V-D-I-P-E	N-E-R-I-L-L-G-N-V-L-V	C-V-L-A-H-E-F-G-E	E-T-P-E-V-Q-A-A-Y-Q	-K-V-V-A-G-V-A-N-A	150
mHemA.pep	101	H-A-S-K-L-R-V-D-E-V	N-E-R-I-L-S-H-C-I-L	V-T-L-A-S-H-P-A-D	E-T-P-A-V-H-A-S-I-L-D	-K-E-L-A-S-V-S-I-V	150
mHemB.pep	101	H-C-D-K-L-E-V-D-I-P-E	N-E-R-I-L-L-G-N-M-I-V	I-V-L-G-H-I-L-G-D	E-T-P-A-A-Q-A-A-F-	O-K-V-V-A-G-V-A-T-A	150
pHemA.pep	101	H-A-S-K-L-R-V-D-E-V	N-E-R-I-L-S-H-C-I-L	V-T-L-A-A-H-P-D-D	E-N-P-S-V-H-A-S-I-L-D	-K-E-L-A-N-V-S-I-V	150
pHemB.pep	101	H-C-D-K-L-E-V-D-I-P-E	N-E-R-I-L-L-G-N-V-T-V	V-V-L-A-P-P-I-L-G-D	E-N-P-D-V-Q-A-A-F-	O-K-V-V-A-G-V-A-N-A	150
		160	170	180	190	200	
hHemA.pep	151	L-E-S-K-Y-R.....	.....	.....	.....	.....	200
hHemB.pep	151	L-A-H-K-Y-E.....	.....	.....	.....	.....	200
mHemA.pep	151	L-E-S-K-Y-R.....	.....	.....	.....	.....	200
mHemB.pep	151	L-A-H-K-Y-E.....	.....	.....	.....	.....	200
pHemA.pep	151	L-E-S-K-Y-R.....	.....	.....	.....	.....	200
pHemB.pep	151	L-A-H-K-Y-E.....	.....	.....	.....	.....	200

Fig. 16c

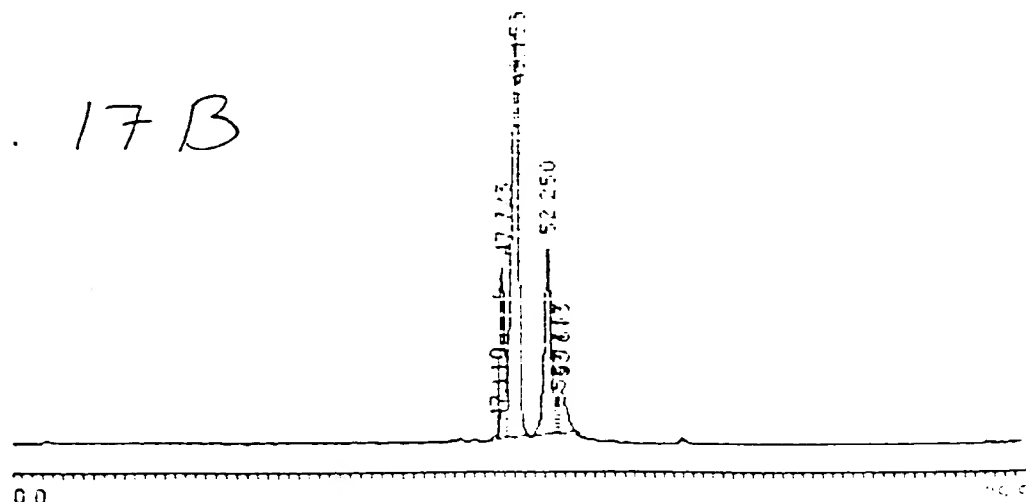
Fig 17A



Analysis: Channel A

Peak No	Time	Type	Height(μV)	Area(μV-sec)	Area%
1	48.200	N	1637	20430	1.515
2	52.076	N1	7439	116393	8.631
3	52.510	N2	32010	881490	65.362
4	53.660	N3	10066	330153	24.483
Total Area				1348474	99.990

Fig. 17B



Analysis: Channel A

Peak No.	Time	Type	Height(μV)	Area(μV-sec)	Area%
1	47.110	N1	1327	24840	0.221
2	52.613	N2	19211	914954	7.535
3	65.753	N	313	8066	0.066
Total Area				12142123	99.996

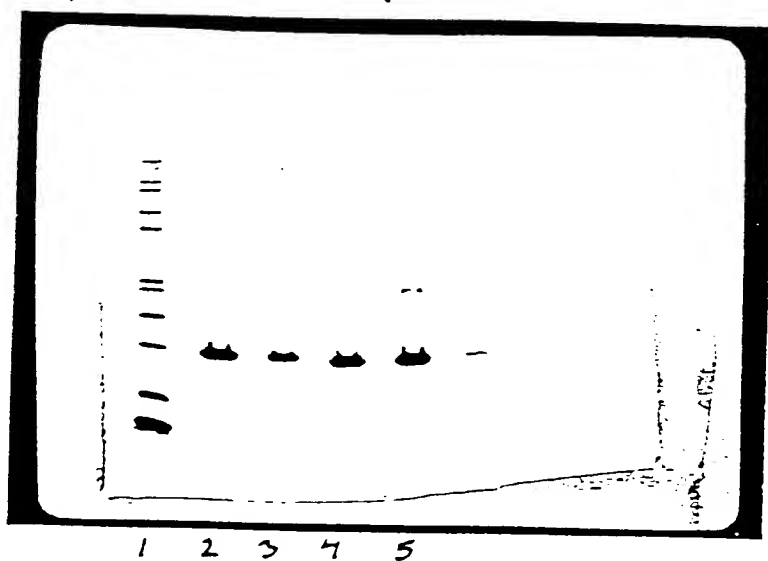


Fig. 18

Fig. 19 A

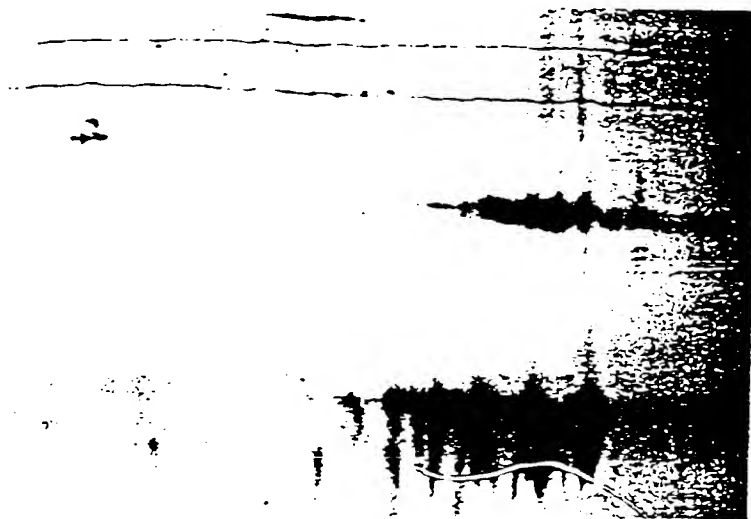
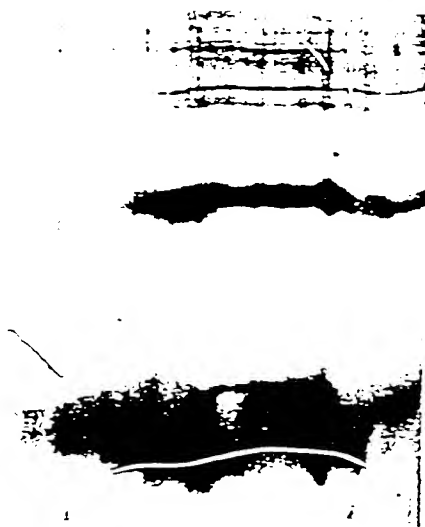


Fig. 19 B



Comparison of Inprol and Hemoglobin Chains in FDCPmix Assay

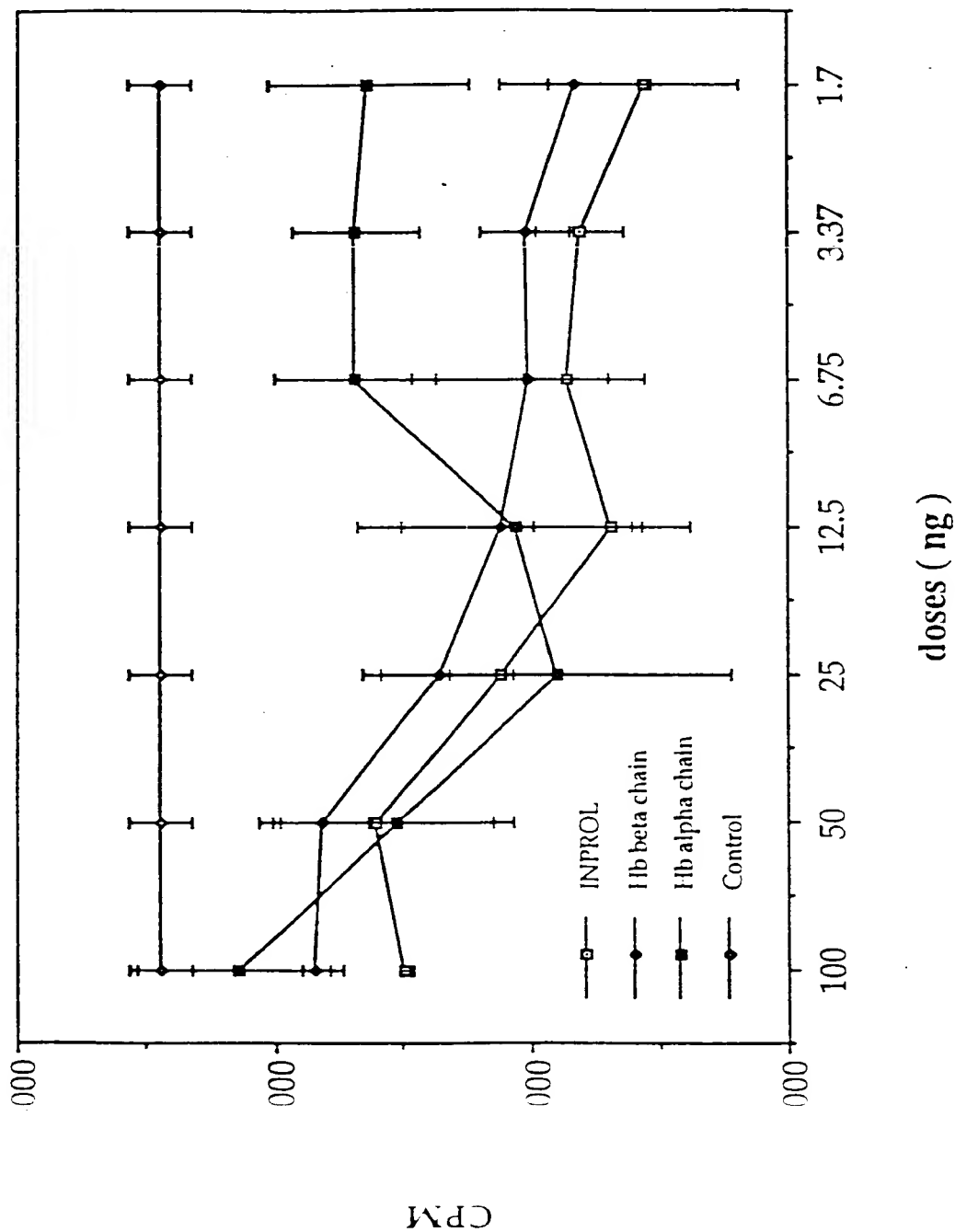
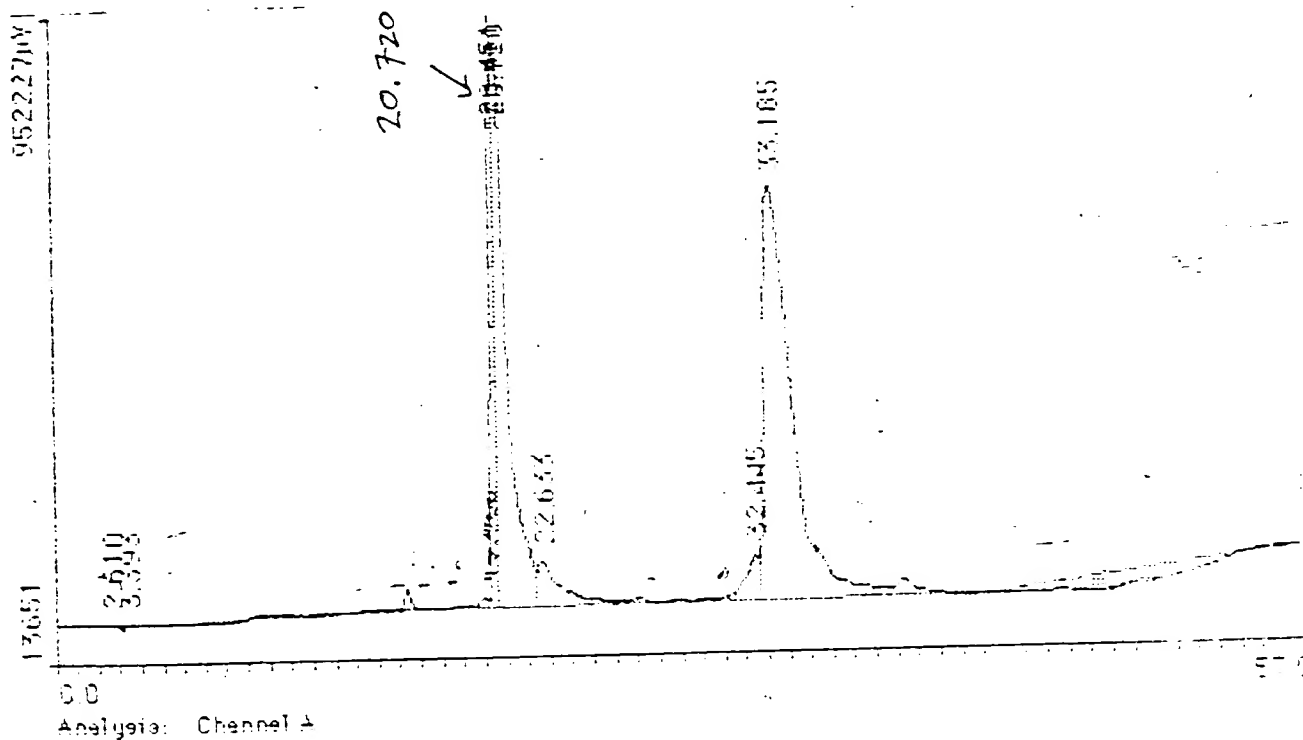


Fig. 20



F 21

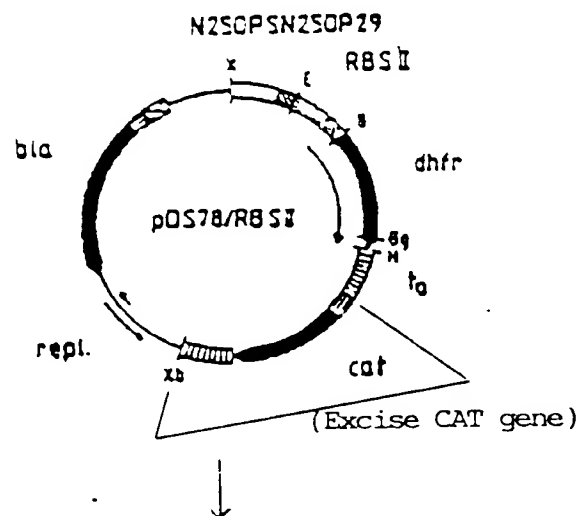


FIG. 22A

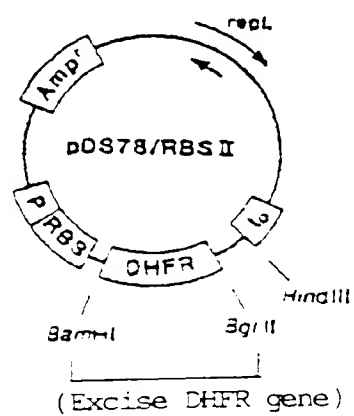


FIG. 22B

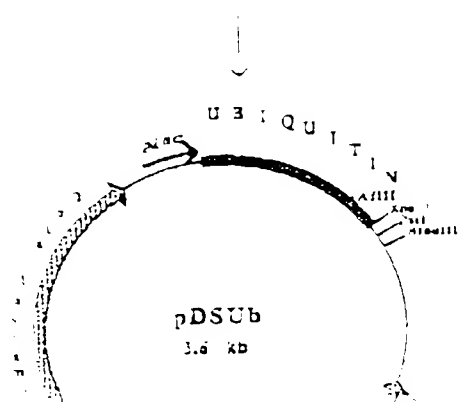


FIG. 22C

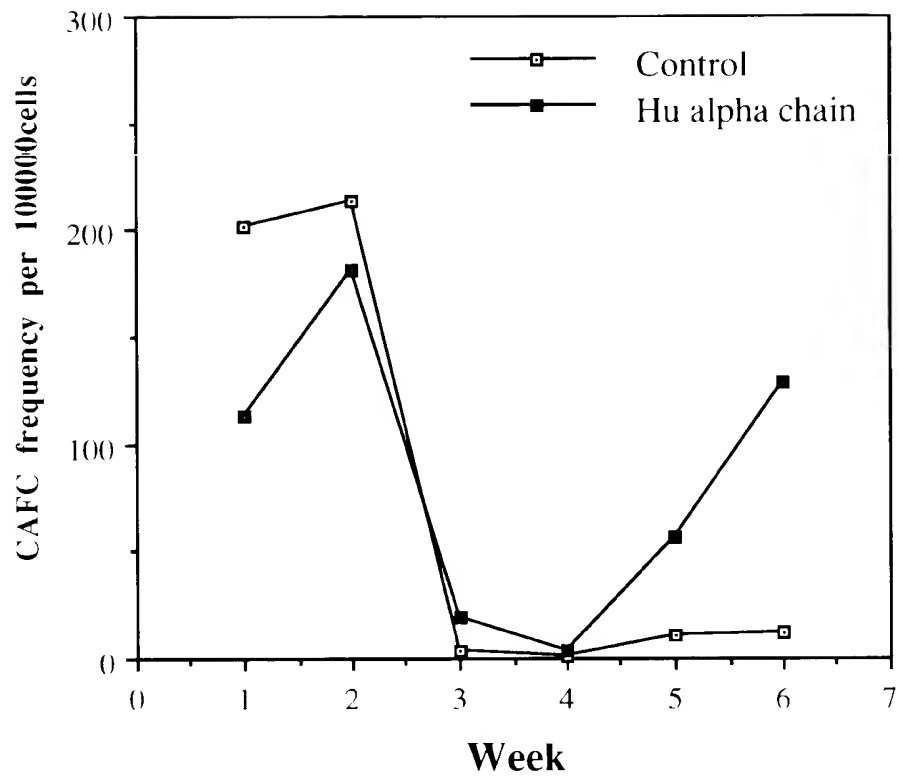


Fig 23